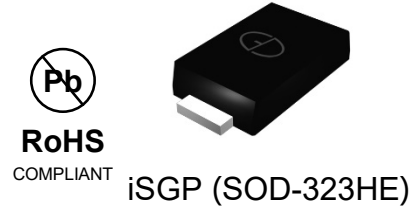


200W,10 - 43V Transient Voltage Suppressors

Features

- Very fast response time
- Glass passivated junction
- Moisture sensitivity: level 1, per J-STD-020
- Plastic package has underwriters Laboratory Flammability Classification 94V-0
- Halogen-free according to IEC 61249-2-21 definition
- 200 W peak pulse power capability with a 10/1000 μ s waveform
- AEC-Q101 qualified



Applications

- SMPS
- Adapters
- Monitor

Absolute Maximum Ratings ($T_A=25^\circ\text{C}$ unless otherwise noted)

Parameter	Symbol	Ratings	Unit
Peak power dissipation with a 10/1000us waveform	P_{PPM}	200	W
Peak pulse current with a 10/1000us waveform	I_{PPM}	See Next Table	A
Power dissipation, on infinite heat sink at $T_L=75^\circ\text{C}$	P_D	1	W
Peak forward surge current, 8.3ms single half-sine wave	I_{FSM}	15	A
Typical Thermal Resistance , Junction to Ambient	$R_{\theta JA}$	110	$^\circ\text{C/W}$
Typical Thermal Resistance , Junction to Case	$R_{\theta JC}$	40	$^\circ\text{C/W}$
Typical Thermal Resistance , Junction to Lead	$R_{\theta JL}$	70	$^\circ\text{C/W}$
Operating junction and storage temperature range	T_J, T_{STG}	-55 to +150	$^\circ\text{C}$

Electrical Characteristics (TA = 25 °C unless otherwise noted)

Part Number	Marking	Breakdown Voltage VBR (Volts)		Test Current I _T (mA)	Stand off Voltage V _{WM} (Volts)	Maximum reverse leakage at V _{WM} I _D (μA)	Maximum Peak Pulse Current I _{ppM} (A)	Maximum Clamping Voltage at I _{ppM} V _C (Volts)
		Min	Max					
AP2TVS10A	2JP	11.1	12.3	1.0	10	5.0	11.8	17.0
AP2TVS11A	2KP	12.2	13.5	1.0	11	5.0	11.0	18.2
AP2TVS12A	2LP	13.3	14.7	1.0	12	5.0	10.1	19.9
AP2TVS13A	2MP	14.4	15.9	1.0	13	5.0	9.3	21.5
AP2TVS14A	2NP	15.6	17.2	1.0	14	5.0	8.6	23.2
AP2TVS15A	2QP	16.7	18.5	1.0	15	5.0	8.2	24.4
AP2TVS16A	2RP	17.8	19.7	1.0	16	5.0	7.7	26.0
AP2TVS17A	2SP	18.9	20.9	1.0	17	5.0	7.3	27.6
AP2TVS18A	2TP	20.0	22.1	1.0	18	5.0	6.9	29.2
AP2TVS20A	2UP	22.2	24.5	1.0	20	5.0	6.2	32.4
AP2TVS22A	2VP	24.4	26.9	1.0	22	5.0	5.6	35.5
AP2TVS24A	2WP	26.7	29.5	1.0	24	5.0	5.1	38.9
AP2TVS26A	2XP	28.9	31.9	1.0	26	5.0	4.8	42.1
AP2TVS28A	2YP	31.1	34.4	1.0	28	5.0	4.4	45.4
AP2TVS30A	2ZP	33.3	36.8	1.0	30	5.0	4.1	48.4
AP2TVS33A	2DR	36.7	40.6	1.0	33	5.0	3.8	53.3
AP2TVS36A	2ER	40.0	44.4	1.0	36	5.0	3.4	58.1
AP2TVS40A	2FR	44.4	49.1	1.0	40	5.0	3.1	64.5
AP2TVS43A	2GR	47.8	52.8	1.0	43	5.0	2.9	69.4

Note:

1. The thermal resistance from junction to ambient, case or lead, mounted on P.C.B with 5×5mm copper pads

Ratings and Characteristics Curves

($T_A = 25^\circ\text{C}$ unless otherwise noted)

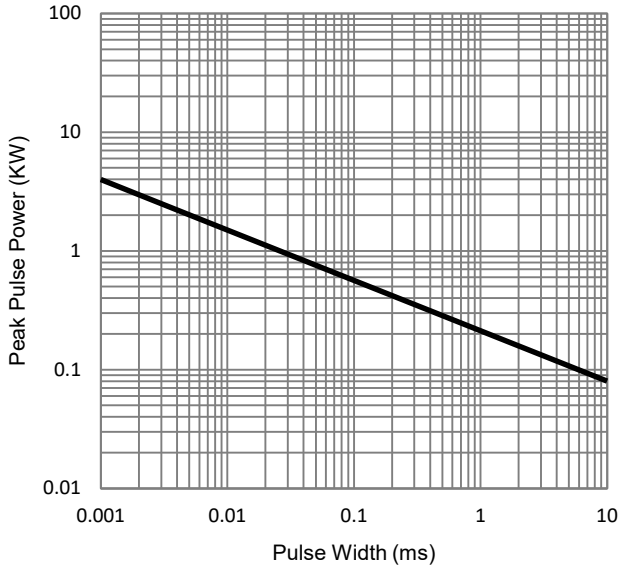


Fig.1 - Peak Pulse Power Derating Curve

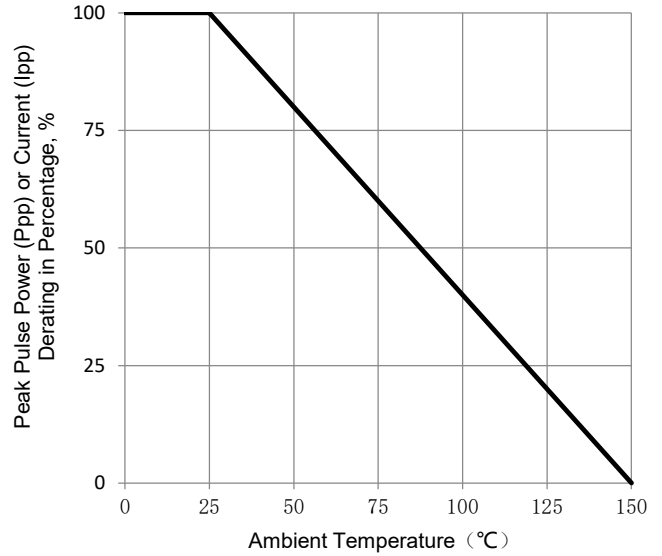


Fig.2 - Pulse Power vs Ambient Temperature

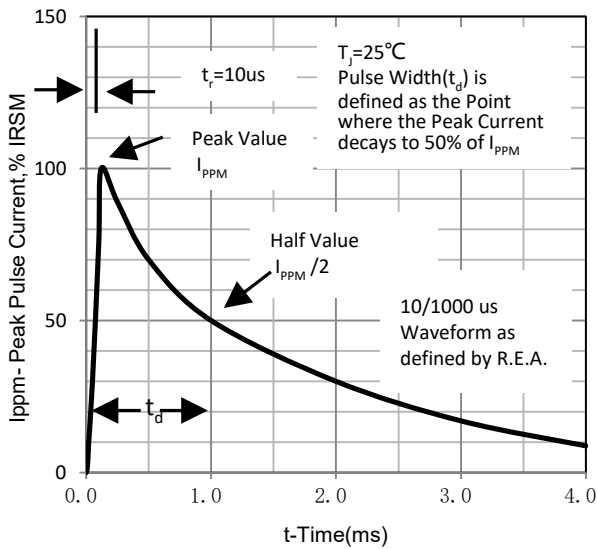


Fig.3 - Pulse Waveform

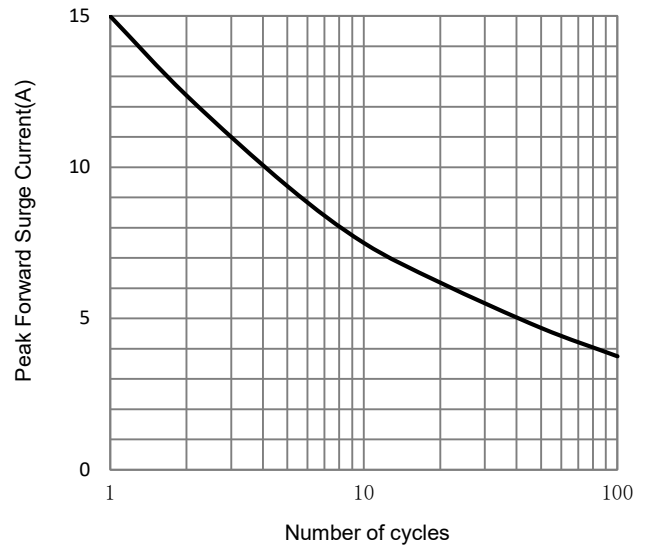
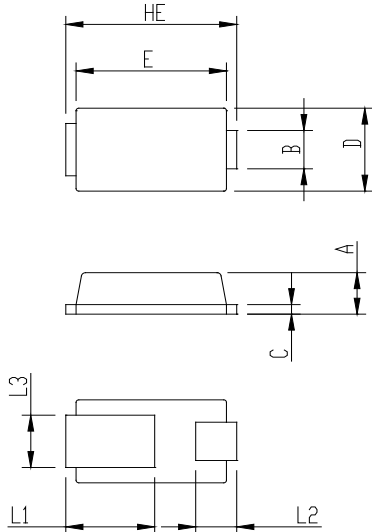


Fig.4 - Maximum Non-Repetitive Surge Current

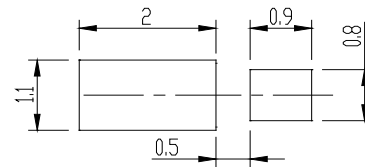
Package Outline Dimensions

in inches (millimeters)

iSGP (SOD-323HE)



iSGP (SOD-323HE)		
	MIN	MAX
A	0.60	0.73
B	0.55	0.75
C	0.10	0.25
D	1.20	1.40
E	2.10	2.30
HE	2.30	2.70
L1	1.10	1.50
L2	0.40	0.75
L3	0.75	1.00



Revision History

Document Version	Date of release	Description of changes
Rev.A	2023.06.15	Released Datasheet
Rev.B	2023.10.23	Modify document format



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